

In the Claims

1. (Currently Amended) A method for the manufacture of an electric motor for a hard disk drive comprising a stator (15), a rotor (11), a shaft (35) and a hydrodynamic bearing arrangement (13) which rotatably supports the rotor (11) with respect to the stator (15), ~~characterized in that~~ wherein
  - a) a bearing sleeve (37) of the hydrodynamic bearing arrangement (13) is manufactured;
  - b) an axial ring (47) is fixed to one end of the shaft (35);
  - c) the shaft (35) is inserted together with the axial ring (47) into bearing sleeve (37);
  - d) one end of the bearing sleeve (37) is sealed with a counter disk (41);
  - e) bearing fluid is inserted into a bearing gap between the shaft (35) and the bearing sleeve (37); and
  - f) the assembly (49) consisting of the shaft (35) and the bearing arrangement (13) is tested before it is installed in the spindle motor.
2. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the shaft (35) is connected to a rotating component (11) of the spindle motor before the assembly is tested.
3. (Currently Amended) A method according to claim 2, ~~characterized in that~~ wherein the rotating component is the rotor (11) of the spindle motor.

4. (Currently Amended) A method according to claim 1 ~~or 2, characterized in that~~ wherein the prefabricated bearing arrangement (13) is bonded to the rotating component.
5. (Currently Amended) A method according to claim 4, ~~characterized in that~~ wherein an adhesive with low gas emission properties is used.
6. (Currently Amended) A method according to claim 1 ~~one of the above claims, characterized in that~~ wherein during manufacture of the bearing sleeve (37), the inner bearing surface (38) of the bearing sleeve (37) is provided with a groove pattern (40).
7. (Currently Amended) A method according to claim 1 ~~one of the above claims, characterized in that~~ wherein a transition fit is provided at a fixed assembly section between the bearing arrangement (13) and the stator (15) or the rotor (11).
8. A method according to claim 1 ~~one of the above claims, characterized in that~~ wherein the bearing sleeve (37) is fixedly mounted onto the stator (15).
9. (Currently Amended) A method according to claim 1 ~~one of the above claims, characterized in that~~ wherein a hub (31) of the rotor (11) is fixedly connected to the shaft (35), with a unit consisting of rotor hub (31), shaft (35) and bearing sleeve (37) then being mounted with respect to the stator (15).
10. (Currently Amended) A spindle motor for a hard disk drive comprising a rotor (11), a stator (15), a shaft (35) and a hydrodynamic bearing arrangement (13) that rotatably

supports the rotor (11) with respect to the stator (15), the hydrodynamic bearing arrangement having a bearing sleeve (37) on whose inner surface (38) a groove pattern (40) is formed in order to create a hydrodynamic radial bearing, an axial ring (47) being mounted onto the shaft (35) to create a hydrodynamic axial bearing, the shaft (35) being inserted into the bearing sleeve (37), one end of the bearing sleeve (37) being sealed with a counter disk (41), bearing fluid being inserted into the bearing gap between the shaft (35) and the bearing sleeve (37), and the hydrodynamic bearing arrangement (13) thus produced forming a fully functional unit that can be tested before being mounted onto the rotor (11) or the stator (15) of the spindle motor

11. (Currently Amended) A spindle motor according to claim 10, ~~e-h-a-r-a-c-t-e-r-i-z-e-d-i-n~~ that wherein the stator (15) or the rotor (11) is firmly fixed to the outer surface of the bearing sleeve (37).
12. (Currently Amended) A spindle motor according to claim 10 ~~o-r-11, e-h-a-r-a-c-t-e-r-i-z-e-d-i-n-t-h-a-t~~ wherein the shaft (35) is inserted into the bearing sleeve (37) before the bearing arrangement is mounted onto the stator (15) or the rotor (11) .
13. (Currently Amended) A spindle motor according to claim 10 ~~o-n-e-o-f-t-h-e-c-l-a-i-m-s-10-t-o-12, e-h-a-r-a-c-t-e-r-i-z-e-d-i-n-t-h-a-t~~ wherein a transition fit is provided between the bearing arrangement (13) and the stator (15) or the rotor (11).
14. (Currently Amended) A spindle motor according to claim 10 ~~o-n-e-o-f-t-h-e-c-l-a-i-m-s-10-t-o-13, e-h-a-r-a-c-t-e-r-i-z-e-d-i-n-t-h-a-t~~ wherein the hydrodynamic bearing arrangement 13 is fixedly connected to the rotor (11) or the stator (15).

15. (Currently Amended) A spindle motor according to claim 14, ~~characterized in~~  
that wherein a groove (55) is provided on at least one of the bonded contact surfaces  
of either the bearing arrangement (13) or the stator (15) or the rotor (11).
16. (Currently Amended) A hard disk drive having a spindle motor according to ~~one of~~  
~~the claims claim 10 to 15.~~
17. (Currently Amended) A hydrodynamic bearing arrangement for an electric motor;  
~~particularly for a spindle motor for a hard disk drive,~~ comprising a stator (15), a rotor  
(11), a shaft (35) and the hydrodynamic bearing arrangement (13), which rotatably  
supports the rotor with respect to the stator, the hydrodynamic bearing arrangement  
(13) having a bearing sleeve (37), an axial ring (47) being mounted onto one end of  
the shaft (35) and the shaft (35) being inserted into the bearing sleeve (37); the  
corresponding end of the bearing sleeve (37) being sealed with a counter disk (41;  
bearing fluid being inserted into the bearing gap between the shaft (35) and the  
bearing sleeve (37), and the unit thus formed from the hydrodynamic bearing  
arrangement (13) and the shaft (35) forming a fully functional unit that can be tested  
and mounted onto the stator (15) or the rotor (11).